

92

ORIGINAL

DOW, LOHNES & ALBERTSON, PLLC
ATTORNEYS AT LAW

SCOTT S. PATRICK
DIRECT DIAL 202-776-2885
spatrick@dlalaw.com

WASHINGTON, D.C.
1200 NEW HAMPSHIRE AVENUE, N.W. • SUITE 800 • WASHINGTON, D.C. 20036-6802
TELEPHONE 202-776-2000 • FACSIMILE 202-776-2222

ONE RAVINIA DRIVE • SUITE 1600
ATLANTA, GEORGIA 30346-2108
TELEPHONE 770-901-8800
FACSIMILE 770-901-8874

May 1, 2000

VIA COURIER

DOCKET FILE COPY ORIGINAL

RECEIVED
MAY 01 2000
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Magalie Roman Salas, Esquire
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

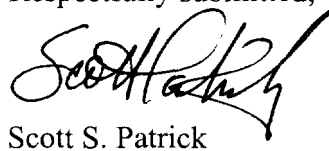
Dear Ms. Salas:

On behalf of Lima Communications Corporation, licensee of WLIO(TV), Lima, Ohio, there are transmitted herewith an original and five copies of its *Petition for Rule Making* proposing the substitution of channel 8 for channel 20 as the station's paired DTV allocation.

A construction permit application reflecting the proposed substitution is being filed concurrently. A copy is attached to this Petition. It is requested that the Commission refrain from acting upon the application until such time as it has completed action upon the Petition.

If any additional information is needed in connection with this matter, please contact me.

Respectfully submitted,


Scott S. Patrick

Enclosure

No. of Copies rec'd 0 + 12
List ABOVE
MMB

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

RECEIVED
MAY 01 2000
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of Section 73.622(b))
Table of Allotments,)
Digital Television Broadcast Stations)
(Lima, Ohio))
)

MM Docket No. _____
RM- _____

To: Chief, Allocations Branch
Policy and Rules Division
Mass Media Bureau

**PETITION FOR RULE MAKING
TO AMEND THE DTV TABLE OF ALLOTMENTS**

Lima Communications Corporation ("LCC"), licensee of WLIO(TV), Lima, Ohio, by its attorneys and pursuant to Sections 1.401 and 73.622(a) of the Commission's Rules (47 C.F.R. §§1.401 and 73.622(a)), hereby respectfully petitions the Commission to institute a rulemaking to amend Section 73.622(b), the DTV Table of Allotments, by substituting channel 8 as the station's paired DTV allocation for the transition period in lieu of channel 20, as originally allotted. Specifically, the DTV Table of Allotments would be amended as follows:

	<u>Present</u>	<u>Proposed</u>
Lima, OH	<u>20</u>, 47	<u>8</u>, 47

Issuance of a Notice of Proposed Rule Making would be consistent with the Commission's rules and policies that are designed to assist smaller market stations in recognition of the special burden that the implementation of digital television places on them – the most

prominent being the staggered DTV construction schedule.¹ Recognizing the intricacies of DTV operations and the need for stations to maximize service efficiently, the Commission also has promised to provide broadcasters with flexibility in developing alternate allotment proposals.²

WLIO(TV) serves the Lima, Ohio DMA, ranked 201st in the United States.³ As set forth in greater detail in the attached Engineering Statement, the proposed channel substitution would permit LCC to reduce the impact of DTV build-out and operating costs by operating more efficiently. Importantly, operation on the VHF channel would improve signal coverage for viewers in the Lima, Ohio DMA, ensuring effective service replication. Thus, the public interest would be served through enhanced service and more efficient use of the broadcast spectrum.

As demonstrated in the Engineering Statement, WLIO-DT's proposed service area encompasses the community of license as required,⁴ and the proposed allotment parameters conform with the Commission's *de minimis* interference standard.⁵ A copy of a concurrently filed construction permit application reflecting the proposed facilities is enclosed.

Accordingly, for the reasons set forth above, LCC respectfully requests that the Commission initiate a rule making proceeding to amend Section 73.622(b) of its Rules to substitute channel 8 for channel 20 for use by WLIO-DT in Lima, Ohio. The amendment would

¹ Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, *Fifth Report and Order*, MM Docket 87-268, 12 FCC Rcd 12809, ¶78 (1997).

² Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, *Sixth Report and Order*, MM Docket 87-268, 12 FCC Rcd 14588, ¶172 (1997).

³ Broadcasting & Cable Yearbook 2000, B-200 (2000).

⁴ 47 C.F.R. §73.623(c)(1).

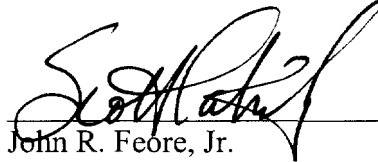
⁵ 47 C.F.R. §73.623(c)(2).

serve the public interest because the proposed change would enable LCC to provide better coverage and would result in a more efficient use of the broadcast spectrum.

Respectfully submitted,

LIMA COMMUNICATIONS CORPORATION

By:

A handwritten signature in dark ink, appearing to read "Scott Patrick", is written over a horizontal line.

John R. Feore, Jr.

Scott S. Patrick

Its Attorneys

Dow, Lohnes & Albertson, PLLC
1200 New Hampshire Avenue, N.W.
Suite 800
Washington, D.C. 20036-6802
(202) 776-2000

Dated: May 1, 2000

ATTACHMENT

Engineering Statement

ENGINEERING STATEMENT
PETITION FOR RULE MAKING
SECTION 73.622 OF THE FCC RULES
TO CHANGE DTV CHANNEL
ON BEHALF OF
LIMA COMMUNICATIONS CORPORATION
WLIO(TV), LIMA, OHIO

APRIL 2000

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

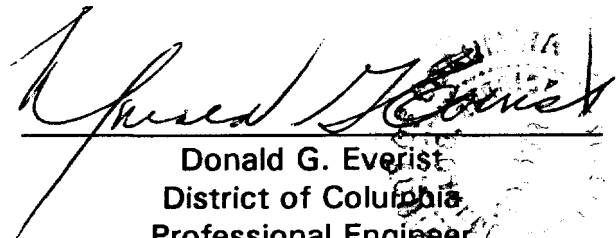
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

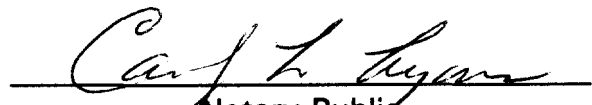
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 28th day of April, 2000.


Notary Public

My Commission Expires: 2/28/2003

This engineering statement has been prepared on behalf of Lima Communications Corporation, licensee of Television Station WLIO(TV), Lima, Ohio is assigned NTSC Channel 35. It is proposed to change the current digital television channel allotment contained in Section 73.622 of the FCC Rules from UHF Channel 20 to VHF Channel 8 at the maximum VHF DT power of 30 kW. The resulting service area encompasses the entire community of license.

This request is supported by an analysis of the impact of this proposal on other authorized NTSC stations, DTV stations, and other proposed DTV allotment changes. An allocation analysis has been performed using the Federal Communications Commission OET Bulletin 69 dated July 2, 1997 and the FCC supplemental processing guidelines dated August 1998. The analysis was performed by using the FCC Longley-Rice model adapted for use for an INTEL computer. The results of this adapted program has been compared to other known FCC studies and have been found to give comparable results.

<u>DTV Channel</u>	<u>Effective Radiated Power (kW)</u>	<u>Height Above Average Terrain (meters)</u>
<u>Existing DTV Table of Allotments, Page B¹</u>		
20	50	165
<u>Proposed DTV Facilities</u>		
8	30	165

¹In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket No. 87-268, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order (FCC 98-24), 2/12/98.

Further, an examination of co-channel low power television and translator stations within 50 km has been performed. No other low power or translator station is found that requires further consideration. Therefore, it is believed that the request for DTV channel will be consistent with the FCC Rules.

TABLE 1
POTENTIAL INTERFEREES OF
WLIO-DT, LIMA, OHIO
CHANNEL 8, 30 KW, 150 METERS
APRIL 2000

<u>NTSC</u>	<u>Channel</u>	<u>City/State</u>	<u>Power kW</u>	<u>Bearing/Distance from WLIO-DT</u>	<u>New Interference</u>
WXYZ-TV	7	Detroit, MI	316	20.7°/205.0 km	0.0%
WHIO-TV	7	Dayton, OH	200	185.0°/113.1 km	0.0%
WISH-TV	8	Indianapolis, IN	316	242.2°/200.4 km	1.9%
WOOD-TV	8	Grand Rapids, IN	316	332.5°/243.9 km	1.2%
WJW(TV)	8	Cleveland, OH	316	70.6°/214.3 km	2.0%
WCHS-TV	8	Charleston, WV	158	143.0°/322.8 km	0.0%
WCPO-TV	9	Cincinnati, OH	316	190.0°/182.9 km	0.0%
<u>DTV</u>					
WBNA-DT	8	Louisville, KY	27	205.3°/332.3 km	0.0%
WMVS-DT	8	Milwaukee, WI	25.1	311.2°/407.3 km	0.0%
WISH-DT	9	Indianapolis, IN	19.5	242.2°/200.4 km	0.0%

ATTACHMENT

**Construction Permit Application
Concurrently Filed**

FOR
FCC
USE
ONLY

FCC 301

APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY
FILE NO.

Section I - General Information

1. Legal Name of the Applicant		
Lima Communications Corporation		
Mailing Address		
1424 Rice Avenue		
City	State or Country (if foreign address)	ZIP Code
Lima	OH	45806
Telephone Number (include area code)	E-Mail Address (if available)	
(419) 228-8835		
	Call Sign	Facility ID Number
	WLIO (TV)	37503

2. Contact Representative (if other than applicant)	Firm or Company Name
Scott S. Patrick	Dow, Lohnes & Albertson, PLLC
Telephone Number (include area code)	E-Mail Address (if available)
(202) 776-2885	spatrick@dlalaw.com

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):

☐ Governmental Entity ☐ Other _____

4. Application Purpose.

- ☐ New station ☐ Major Modification of construction permit
☐ Major Change in licensed facility ☒ Minor Modification of construction permit
☐ Minor Change in licensed facility ☐ Major Amendment to pending application
☐ Minor Amendment to pending application

a. File number of original construction permit: BPCDT-19991007AAY ☐ N/A

b. Service Type: ☐ AM ☐ FM ☐ TV ☒ DTV

c. Community of License:

City	State
Lima	OH

d. Facility Type: ☒ Main ☐ Auxiliary

If an amendment, submit as an Exhibit a listing by Section and Question Number of the portions of the pending application that are being revised.

Exhibit No.

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

Section II - Legal

1. **Certification.** Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets. ☒ Yes ☐ No

2. **Parties to the Application.**

- a. List the applicant, and, if other than a natural person, its officers, directors, stockholders with attributable interests, non-insulated partners and/or members. If a corporation or partnership holds an attributable interest in the applicant, list separately its officers, directors, stockholders with attributable interests, non-insulated partners and/or members. Create a separate row for each individual or entity. Attach additional pages if necessary.

- | | |
|---|---|
| (1) Name and address of the applicant and, if applicable, its officers, directors, stockholders, or partners (if other than individual also show name, address and citizenship of natural person authorized to vote the stock). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and partners. | (2) Citizenship.
(3) Positional Interest: Officer, director, general partner, limited partner, LLC member, etc.
(4) Percentage of votes.
(5) Percentage of equity. |
|---|---|

(1)	(2)	(3)	(4)	(5)

- b. Applicant certifies that equity interests not set forth above are non-attributable.

☐ Yes ☐ No

☐ N/A

See Explanation
in Exhibit No.

3. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest.

Exhibit No.

☐ N/A

4. **Multiple Ownership.**

- a. Applicant certifies that the proposed facility:

☐ Yes ☐ No


See Explanation
in Exhibit No.

- complies with the Commission's multiple and cross-ownership rules;
- does not present an issue under the Commission's cross-interest policy;
- does not present an issue under the Commission's policies relating to media interests of immediate family members;
- complies with the Commission's policies relating to future ownership interests; and
- complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors.

Section II - Legal

- b. **Radio Applicants Only.** If the grant of the application would result in certain principal community service contour overlaps, see Local Radio Ownership Worksheet, Question 1, applicant certifies that all relevant information has been placed in public inspection file(s) and submitted to the Commission. ☐ Yes ☐ No ☐ N/A See Explanation in Exhibit No.
5. **Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in, or connection with: ☐ Yes ☐ No See Explanation in Exhibit No.
- a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or
- b. any pending broadcast application in which character issues have been raised.
6. **Adverse Findings.** Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination. ☐ Yes ☐ No See Explanation in Exhibit No.
7. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments. ☐ Yes ☐ No See Explanation in Exhibit No.
8. **Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area. ☐ Yes ☐ No
9. **Local Public Notice.** Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580. ☐ Yes ☐ No
10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. ☐ Yes ☐ No ☐ N/A
- An exhibit is required unless this question is inapplicable.** Exhibit No.
11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862. ☒ Yes ☐ No

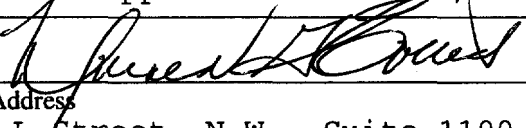
I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing Bruce Opperman	Typed or Printed Title of Person Signing Vice President
Signature 	Date April 28, 2000

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Donald G. Everist Cohen, Dippell and Everist, P.C.		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date April 27, 2000	
Mailing Address 1300 L Street, N.W., Suite 1100			
City Washington		State or Country (if foreign address) D.C.	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cdepc@worldnet.att.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

Certification Checklist: A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☒ No
- (b) It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. ☒ Yes ☐ No
- (c) It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. ☒ Yes ☐ No
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. ☒ Yes ☐ No

Applicant must submit the Exhibit called for in Item 13.

3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. ☒ Yes ☐ No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. ☒ Yes ☐ No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. ☒ Yes ☐ No

SECTION III-D DTV Engineering

WLIO-DT(8)

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number: DTV 8 Analog TV, if any 35
2. Zone: ☒ I ☐ II ☐ III
3. Antenna Location Coordinates: (NAD 27)
- 40 ° 44 ' 54 " ☒ N ☐ S Latitude
84 ° 07 ' 55 " ☐ E ☒ W Longitude
4. Antenna Structure Registration Number: 1014519
- ☐ Not applicable ☐ FAA Notification Filed with FAA
5. Antenna Location Site Elevation Above Mean Sea Level: 265.2 meters
6. Overall Tower Height Above Ground Level: 167.3 meters
7. Height of Radiation Center Above Ground Level: 144.8 meters
8. Height of Radiation Center Above Average Terrain: 150 meters
9. Maximum Effective Radiated Power (average power): 30 kW
10. Antenna Specifications:
- | | | |
|----|-------------------------------|-------------------------------|
| a. | Manufacturer
<u>Andrew</u> | Model
<u>ATW10V5-HSO-8</u> |
|----|-------------------------------|-------------------------------|
- b. Electrical Beam Tilt: 1.25 degrees ☐ Not Applicable
- c. Mechanical Beam Tilt: _____ degrees toward azimuth _____ degrees True ☒ Not Applicable
- Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).
- d. Polarization: ☒ Horizontal ☐ Circular ☐ Elliptical
- Exhibit No.
Suppl. A

TECH BOX

e. Directional Antenna Relative Field Values: ☒ Not applicable (Nondirectional)

Rotation: _____ ° ☐ No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.
N/A

11. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.")

☒ Yes ☐ No

See Exhibit E

If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.

Exhibit No.
N/A

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefor. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.
N/A

13. **Environmental Protection Act.** Submit in an Exhibit the following:

Exhibit No.
E

- a. If **Certification Checklist** Item 3 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 3, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 3 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.

ENGINEERING STATEMENT
RE DTV BROADCAST ENGINEERING DATA
ON BEHALF OF
LIMA COMMUNICATIONS CORPORATION
WLIO-DT, LIMA, OHIO
CHANNEL 8 30 KW ERP 150 METERS

APRIL 2000

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

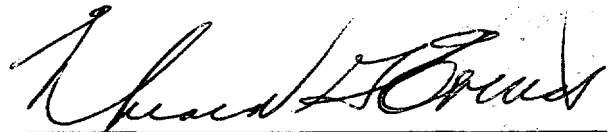
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

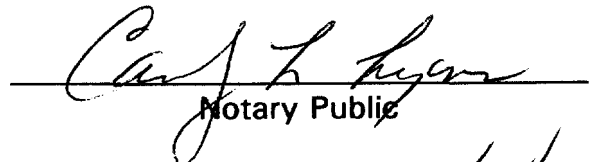
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 27th day of April, 2000.


Notary Public

My Commission Expires: 2/28/2003

Introduction

This engineering statement has been prepared on behalf of Lima Communications Corporation, licensee of WLIO(TV). The purpose of this engineering statement is to accompany it's request for maximization of digital television ("DTV") facilities. Included with this report are the exhibits referred to in this text along with FCC Form 301, Section III-D. A separate request has been prepared to support a rulemaking request.

Lima Communications Corporation operates Station WLIO(TV) on NTSC television Channel 35 with a maximum visual effective radiated power (ERP) of 661 kW (horizontal polarization) and an antenna height above average terrain (HAAT) of 165 meters (541 feet). Lima Communications Corporation has been allocated DTV Channel 20 with facilities of 50 kW and an HAAT of 165 meters in the revised DTV Table of Allotments.¹ Lima Communications Corporation proposes to maximize its DTV facilities of 30 kW (horizontal polarization) on Channel 8 at a reduced HAAT of 150 meters. This is in response to the Community Broadcasting Protection Act enacted November 29, 1999.

WLIO-DT Tower

The DTV antenna will be side-mounted on an existing tower having a total overall structure height above ground of 167.3 meters (549 feet). The existing transmitter site is located at 1424 Rice Avenue, Lima, Ohio. The tower has been registered under the number 1014519.

¹"In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket No. 87-286, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order. (FCC 98-24), 2/12/98, DTV Table of Allotments (Pg. B-43).

North Latitude: 40° 44' 54"

West Longitude: 84° 07' 55"

NAD-27

Equipment Data

An Andrew, Type ATW10V5-HSO-8 (or equivalent) antenna, with 1.25° electrical beam tilt will be installed. The vertical plane pattern and other exhibits required by Section 73.625(c) are attached in Appendix A.

Elevation Data

(Existing Tower; No Change in Overall Height)

Elevation of site above mean sea level	265.2 meters (870 feet)
Overall height above ground of the existing antenna structure (including beacon)	167.3 meters (549 feet)
Overall height above mean sea level of existing tower (including beacon)	432.5 meters (1419 feet)
Center of radiation of Channel 8 antenna above ground	144.8 meters (475 feet)
Center of radiation of Channel 8 antenna above mean sea level	410.0 meters (1345 feet)
Antenna height above average terrain	150 meters

Note: Slight height differences result due to conversion to metric.

Allocation

An allocation study from the proposed site has been performed since the proposed DTV facilities will extend the replicated service area in every direction as the effective radiated power authorized for the WLIO-DT facilities in the Sixth Report.

Interference Analysis

A study of predicted interference caused by the proposed WLIO-DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows98/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km² using 3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids.

All studies are based upon data in the update of the FCC's engineering data base dated December 30, 1999. Table I provides a summary of that analysis.

Other Licensed and Broadcast Facilities

There are no AM stations within 3.2 km of the existing WLIO(TV) tower site. There are no FM broadcast stations operating within 300 meters of the existing site. The only TV broadcast station to operate within 300 meters of the site is WLIO(TV). WLIO(TV) operates at the proposed the transmitter site.

No adverse technical effect is anticipated by the proposed DTV operation to any other FCC licensed facility. If required, the licensee of WLIO-DT will install filters or take other measures as necessary to resolve the problem.

Radio Frequency Field Level

The DTV antenna will be side-mounted on the existing tower at 144.8 meters above ground level. WLIO(TV) is the only broadcast station which currently operates at the site. The following non-broadcast facilities are also licensed to transmit from the tower:

WHQ212

KFK539

KFK538

WPOQ453

Pusuant to OET Bulletin No. 65, dated August 1997, these non-broadcast stations are all exempt from radio frequency field ("RFF") level evaluations for the following reason:

<u>Station</u>	<u>Licensed Under Part No.</u>	<u>Reason for Exemption</u>
WHQ212	Part 74, Subpart F	Subpart F Exempt
KFK539	Part 90	Antenna Height > 10 meters
KFK538	Part 90	ERP < 1000 watts
WPOQ453	Part 74, Subpart F	Subpart F Exempt

Therefore, the RFF study will consider the following stations:

WLIO(TV) Channel 35
 WLIO-DT Channel 8

The RFF radiation contribution of each station will be calculated using the following formula:

$$S = \frac{33.4(F^2) \text{ Total ERP}}{R^2}$$

where:

S = power density in $\mu\text{W}/\text{cm}^2$

F = relative field factor

Total ERP = ERP Horizontal Polarization + ERP Vertical Polarization

R = RCAGL - 2 meters

ERP = RMS ERP in watts for DTV Stations

ERP = $[0.4\text{ERP}_v + \text{ERP}_a]$ for NTSC Stations

ERP_v = peak visual ERP in watts

ERP_a = RMS aural ERP in watts

WLIO(TV) NTSC Facility

Channel 35 Freq: 596-602 MHz Range
 ERP = (0.4)[661,000 watts (visual)] + [66,100 watts (aural)]
 Polarization = Horizontal

RCAGL -2 meters = 156.8 meters

WLIO(TV) is using an RCA TFU-30JA antenna with 0.5° electrical beam tilt. The manufacturer's vertical plane pattern for this antenna is included as Exhibit E-5. Based on this plot, the field factor will be less than 0.2 at any angle greater than 5 degrees below the horizon. A value of 0.2 will be used in the calculation.

$$S = \frac{33.4 (F^2) \text{ Tot ERP}}{R^2}$$

Tot ERP =	330,500 watts (Horizontal Only)
R =	156.8 meters
F =	.2 (field factor)

$$S = 18.0 \text{ uW/cm}^2 \quad S = 0.018 \text{ mW/cm}^2$$

WLIO(TV) contributes 0.018 mW/cm² at 2 meters above the ground.
The limit for an uncontrolled environment is f/1500 for a station broadcasting on 599 MHz.

$$(599 \text{ MHz})/1500 = 0.399 \text{ mW/cm}^2 \text{ is the RFR limit for WLIO(TV)}$$

Therefore:

WLIO(TV) NTSC facility contributes 4.51% RFR for an uncontrolled environment two meters above the ground at the tower site.

WLIO-DT DTV Facility

Channel 8	Freq:	180-186 MHz Range
	ERP =	30,000 watts
	Polarization =	Horizontal
	RCAGL - 2 meters =	142.8 meters

WLIO-DT proposes to utilize an Andrew ATW10V5-HSO-8 antenna with 1.25° electrical beam tilt. The manufacturer's vertical plane pattern is included in Supplement A. Based on this plot, the field factor will be less than 0.2 at any angle greater than 5 degrees below the horizon. A value of 0.2 will be used in the calculation.

$$S = \frac{33.4 (F^2) \text{ Tot ERP}}{R^2}$$

Tot ERP =	30,000 watts--Average-- (Horizontal Only)
R =	142.8 meters
F =	0.2 (field factor)

$$S = 1.965 \text{ uW/cm}^2$$

Therefore WLIO-DT contributes 0.002 mW/cm^2 at 2 meters above the ground.
The limit for an uncontrolled environment is 0.2 mW/cm^2 for a station broadcasting on 183 MHz.

0.2 mW/cm^2 is the RFF limit for WLIO-DT

Therefore:

WLIO-DT's proposed DTV facility will contribute 1.0% RF for an uncontrolled environment two meters above the ground at the tower site.

Total RFF at the Site

The total RFF contribution of all transmitters can now be calculated:

$$\text{Total RFF} = \text{WLIO(TV) RFF} + \text{WLIO-DT RFF}$$

$$\text{Total RFF} = 4.51\% + 1.0\%$$

$$\text{Total RFF} = 5.51\%$$

Therefore, all facilities contribute only 5.51% RFR for an uncontrolled environment 2 meters above the ground at the tower site.

The tower site is located inside a chain link fence with a locked gate to prevent unauthorized access to the tower.

Finally, provisions will be made to reduce power or to terminate the transmitter emissions as appropriate when it is necessary for authorized personnel to climb the tower. All facilities operating on the tower will coordinate to ensure that workers will not be subjected to RFF levels in excess of the current FCC guidelines listed in OET Bulletin No. 65, dated August 1997.

Environmental Assessment

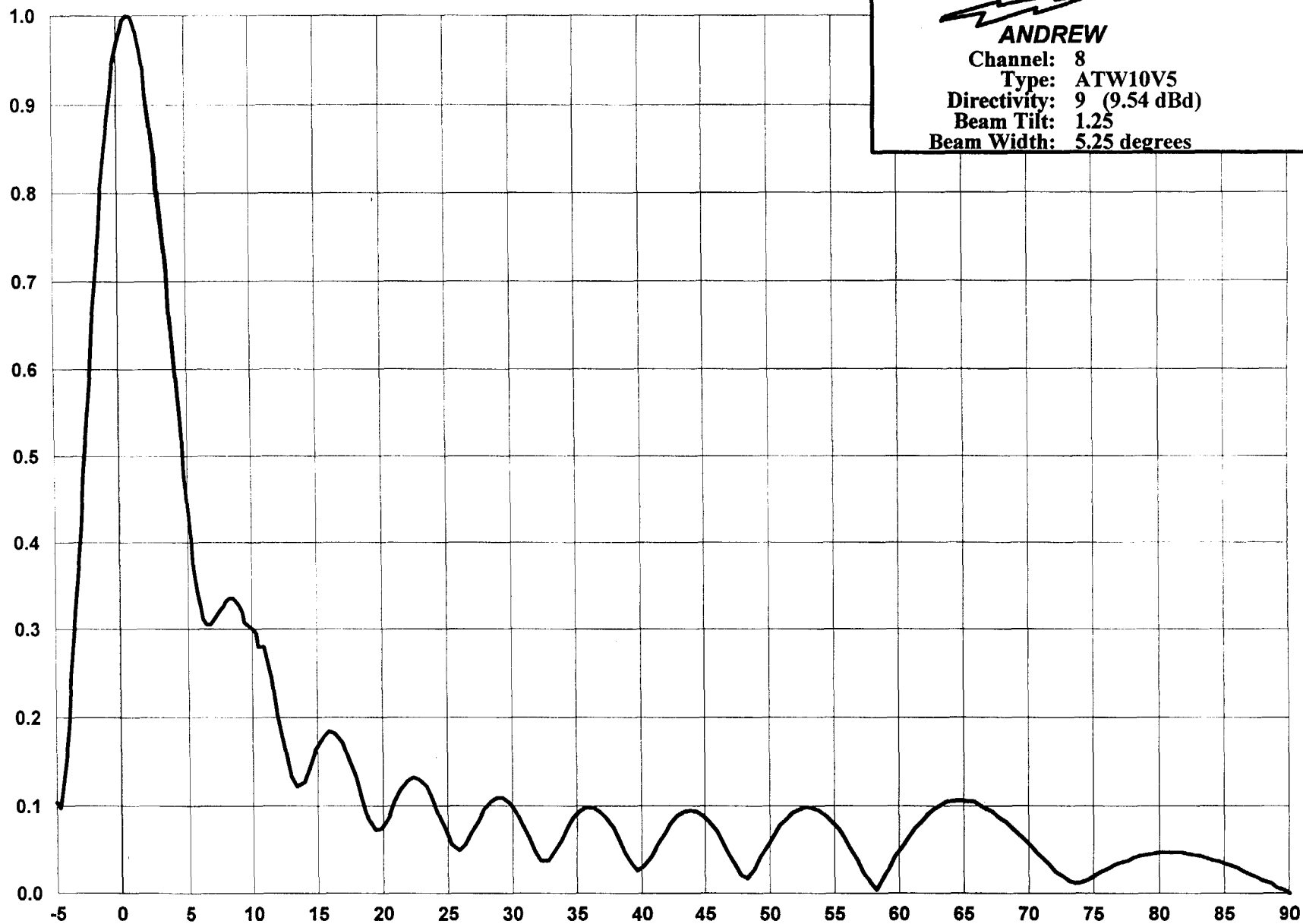
An environmental assessment (EA) is categorically excluded under Section 1.1307 of the FCC Rules and Regulations since the licensee indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing guyed tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, August 1997 edition.

TABLE 1
POTENTIAL INTERFEREES OF
WLIO-DT, LIMA, OHIO
CHANNEL 8, 30 KW, 150 METERS
APRIL 2000

<u>NTSC</u>	<u>Channel</u>	<u>City/State</u>	<u>Power kW</u>	<u>Bearing/Distance from WLIO-DT</u>	<u>New Interference</u>
WXYZ-TV	7	Detroit, MI	316	20.7°/205.0 km	0.0%
WHIO-TV	7	Dayton, OH	200	185.0°/113.1 km	0.0%
WISH-TV	8	Indianapolis, IN	316	242.2°/200.4 km	1.9%
WOOD-TV	8	Grand Rapids, IN	316	332.5°/243.9 km	1.2%
WJW(TV)	8	Cleveland, OH	316	70.6°/214.3 km	2.0%
WCHS-TV	8	Charleston, WV	158	143.0°/322.8 km	0.0%
WCPO-TV	9	Cincinnati, OH	316	190.0°/182.9 km	0.0%
<u>DTV</u>					
WBNA-DT	8	Louisville, KY	27	205.3°/332.3 km	0.0%
WMVS-DT	8	Milwaukee, WI	25.1	311.2°/407.3 km	0.0%
WISH-DT	9	Indianapolis, IN	19.5	242.2°/200.4 km	0.0%

APPENDIX A
ANTENNA
MANUFACTURER
DATA



ANDREW

Channel: 8

Type: ATW10V5

Directivity: 9 (9.54 dBd)

Beam Tilt: 1.25

Beam Width: 5.25 degrees

ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

Company: WLIO-DT
Site: Lima, OH
Proposal Number:

Author:

Date: 4/29/2000



Angle	Amp	dB	Angle	Amp	dB	Angle	Amp	dB	Angle	Amp	dB
-5.00	0.103	-19.74	9.00	0.328	-9.68	36.00	0.098	-20.20	63.50	0.103	-19.77
-4.75	0.097	-20.26	9.25	0.320	-9.90	36.50	0.096	-20.38	64.00	0.105	-19.60
-4.50	0.114	-18.86	9.50	0.309	-10.20	37.00	0.091	-20.85	64.50	0.106	-19.52
-4.25	0.149	-16.54	9.75	0.305	-10.31	37.50	0.082	-21.69	65.00	0.105	-19.55
-4.00	0.195	-14.20	10.00	0.301	-10.43	38.00	0.070	-23.07	65.50	0.104	-19.63
-3.75	0.247	-12.15	10.50	0.280	-11.06	38.50	0.056	-25.02	66.00	0.102	-19.84
-3.50	0.303	-10.37	11.00	0.280	-11.06	39.00	0.042	-27.45	66.50	0.098	-20.16
-3.25	0.361	-8.85	11.50	0.244	-12.26	39.50	0.031	-30.14	67.00	0.094	-20.52
-3.00	0.419	-7.56	12.00	0.203	-13.87	40.00	0.028	-31.11	67.50	0.089	-21.04
-2.75	0.479	-6.39	12.50	0.163	-15.73	40.50	0.035	-29.00	68.00	0.083	-21.65
-2.50	0.537	-5.40	13.00	0.133	-17.54	41.00	0.048	-26.39	68.50	0.077	-22.31
-2.25	0.595	-4.51	13.50	0.121	-18.33	41.50	0.061	-24.29	69.00	0.070	-23.12
-2.00	0.651	-3.73	14.00	0.128	-17.88	42.00	0.073	-22.70	69.50	0.063	-24.04
-1.75	0.704	-3.05	14.50	0.146	-16.72	42.50	0.083	-21.60	70.00	0.056	-25.07
-1.50	0.755	-2.44	15.00	0.165	-15.67	43.00	0.090	-20.91	70.50	0.048	-26.38
-1.25	0.801	-1.93	15.50	0.178	-14.97	43.50	0.093	-20.59	71.00	0.041	-27.81
-1.00	0.844	-1.47	16.00	0.184	-14.71	44.00	0.094	-20.58	71.50	0.034	-29.46
-0.75	0.882	-1.09	16.50	0.181	-14.83	44.50	0.091	-20.83	72.00	0.027	-31.50
-0.50	0.916	-0.76	17.00	0.171	-15.36	45.00	0.085	-21.41	72.50	0.020	-33.84
-0.25	0.944	-0.50	17.50	0.152	-16.35	45.50	0.077	-22.31	73.00	0.015	-36.43
0.00	0.967	-0.29	18.00	0.130	-17.74	46.00	0.066	-23.65	73.50	0.012	-38.12
0.25	0.984	-0.14	18.50	0.105	-19.58	46.50	0.053	-25.49	74.00	0.013	-37.86
0.50	0.995	-0.04	19.00	0.084	-21.55	47.00	0.040	-28.04	74.50	0.015	-36.24
0.75	1.000	0.00	19.50	0.072	-22.83	47.50	0.026	-31.55	75.00	0.019	-34.32
1.00	0.999	-0.01	20.00	0.075	-22.44	48.00	0.019	-34.61	75.50	0.023	-32.67
1.25	0.993	-0.06	20.50	0.089	-21.01	48.50	0.022	-33.25	76.00	0.027	-31.28
1.50	0.980	-0.18	21.00	0.106	-19.51	49.00	0.034	-29.44	76.50	0.031	-30.08
1.75	0.962	-0.34	21.50	0.119	-18.47	49.50	0.047	-26.50	77.00	0.035	-29.24
2.00	0.939	-0.55	22.00	0.129	-17.82	50.00	0.060	-24.45	77.50	0.038	-28.51
2.25	0.911	-0.81	22.50	0.132	-17.62	50.50	0.072	-22.91	78.00	0.041	-27.84
2.50	0.879	-1.12	23.00	0.128	-17.87	51.00	0.081	-21.82	78.50	0.043	-27.39
2.75	0.842	-1.49	23.50	0.119	-18.50	51.50	0.089	-21.05	79.00	0.044	-27.16
3.00	0.802	-1.92	24.00	0.104	-19.64	52.00	0.094	-20.53	79.50	0.045	-26.96
3.25	0.759	-2.40	24.50	0.087	-21.22	52.50	0.097	-20.26	80.00	0.046	-26.77
3.50	0.713	-2.94	25.00	0.069	-23.20	53.00	0.097	-20.22	80.50	0.046	-26.74
3.75	0.667	-3.52	25.50	0.055	-25.24	53.50	0.095	-20.41	81.00	0.046	-26.74
4.00	0.619	-4.17	26.00	0.050	-26.00	54.00	0.091	-20.79	81.50	0.046	-26.74
4.25	0.571	-4.87	26.50	0.058	-24.80	54.50	0.085	-21.40	82.00	0.045	-26.92
4.50	0.525	-5.60	27.00	0.071	-22.97	55.00	0.077	-22.27	82.50	0.044	-27.11
4.75	0.480	-6.38	27.50	0.086	-21.34	55.50	0.067	-23.43	83.00	0.042	-27.50
5.00	0.439	-7.15	28.00	0.098	-20.20	56.00	0.056	-25.01	83.50	0.040	-27.92
5.25	0.401	-7.94	28.50	0.105	-19.57	56.50	0.044	-27.11	84.00	0.038	-28.37
5.50	0.369	-8.66	29.00	0.109	-19.27	57.00	0.031	-30.22	84.50	0.036	-28.84
5.75	0.343	-9.29	29.50	0.107	-19.45	57.50	0.017	-35.21	85.00	0.033	-29.58
6.00	0.324	-9.79	30.00	0.100	-20.04	58.00	0.007	-42.80	85.50	0.031	-30.14
6.25	0.312	-10.12	30.50	0.089	-21.03	58.50	0.011	-39.00	86.00	0.028	-31.01
6.50	0.306	-10.29	31.00	0.075	-22.50	59.00	0.024	-32.43	86.50	0.025	-32.00
6.75	0.306	-10.29	31.50	0.059	-24.57	59.50	0.037	-28.64	87.00	0.021	-33.49
7.00	0.309	-10.20	32.00	0.045	-26.92	60.00	0.049	-26.12	87.50	0.018	-34.85
7.25	0.315	-10.03	32.50	0.037	-28.64	60.50	0.060	-24.40	88.00	0.014	-37.01
7.50	0.321	-9.87	33.00	0.040	-27.95	61.00	0.070	-23.06	88.50	0.011	-39.13
7.75	0.327	-9.71	33.50	0.052	-25.73	61.50	0.080	-21.97	89.00	0.007	-43.04
8.00	0.332	-9.58	34.00	0.065	-23.73	62.00	0.088	-21.16	89.50	0.004	-47.92
8.25	0.335	-9.50	34.50	0.078	-22.13	62.50	0.094	-20.55	90.00	0.000	---
8.50	0.336	-9.47	35.00	0.088	-21.07	63.00	0.099	-20.12			
8.75	0.333	-9.55	35.50	0.095	-20.42	63.50	0.103	-19.77			

ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

Company: WLIO-DT
Site: Lima, OH
Proposal Number:

Date: 4/29/2000
Author:

EXHIBIT 1

Request for Waiver of 47 C.F.R. § 73.3572

By this application, Lima Communications Corporation ("LCC") seeks authorization for the construction of digital facilities for WLIO (the "Station"). LCC concurrently is submitting a Petition for Rule Making seeking to substitute channel 8 as the Station's paired DTV allocation for the transition period in lieu of channel 20, as originally allotted. As explained below, LCC is submitting the instant application to ensure protection of the Station's maximized digital facilities on the proposed channel. Accordingly, waiver of Section 73.3572 of the Commission's rules (47 C.F.R. § 73.3572) is hereby requested to the extent necessary for the Commission to process the application. LCC requests that the Commission defer processing the application until such time as it has acted upon the Petition for Rule Making.

On November 29, 1999, the President signed into law the Community Broadcasters Protection Act of 1999 ("CBPA") creating a new Class A television service and according existing low power television ("LPTV") stations "primary" status *vis-à-vis* full power stations if they met certain minimum programming requirements.¹ However, the CBPA also provided that a full power station would be permitted to "maximize" its DTV facilities irrespective of interference with the new Class A stations so long as the station complied with certain procedures and filed a maximization application on or before May 1, 2000.² To resolve any "technical problems" that may obstruct maximization, the CBPA also allows such a station to change its DTV channel assignment without protecting Class A stations.³

The Commission has not yet had the opportunity to act on LCC's Petition for Rule Making to substitute a new DTV allotment for the Station. However, it is not clear that maximized facilities proposed in applications submitted after the statutory deadline of May 1, 2000 have certain protection against Class A stations. If the Station were to wait to submit the instant construction permit application until after the Commission had acted upon the Petition for Rule Making, it is possible that the Station's maximized service area would not be protected. In light of (1) Congress' intention to provide DTV broadcasters with a full opportunity to maximize; (2) Congress' intention to have the specifics of such maximization known by a date certain through the filing of an application on or before May 1, 2000; and (3) the fact that the CBPA does not explicitly account for the circumstances described herein, LCC accordingly is requesting waiver of Section 73.3572 to permit the submission of this construction permit application for the Station. Grant of the waiver request is in the public interest because it will allow the Commission to authorize maximized facilities for the Station upon grant of the requested channel substitution.

¹ Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I at pp. 1501A-594 – 1501A-598 (1999), *codified at* 47 U.S.C. § 336(f).

² 47 U.S.C. § 336(f)(1)(D).

³ *Id.*

EXHIBIT 2

Request for Waiver of 47 C.F.R. § 73.3517 and, if necessary, § 73.3518

By this application, Lima Communications Corporation ("LCC") seeks authorization for the construction of digital facilities for WLIO (the "Station"). LCC has submitted a concurrent application to construct the Station's DTV facilities on its allotted channel. As explained below, LCC is submitting the instant application to ensure protection of the Station's maximized digital facilities. Accordingly, waiver of Section 73.3517 of the Commission's rules (47 C.F.R. § 73.3517) is hereby requested. To the extent necessary, LCC also seeks waiver of Section 73.3518.

On November 29, 1999, the President signed into law the Community Broadcasters Protection Act of 1999 ("CBPA") creating a new Class A television service and according existing low power television ("LPTV") stations "primary" status *vis-à-vis* full power stations if they met certain minimum programming requirements.¹ However, the CBPA also provided that a full power station would be permitted to "maximize" its DTV facilities irrespective of interference with the new Class A stations so long as the station complied with certain procedures and filed a maximization application on or before May 1, 2000.² To resolve any "technical problems" that may obstruct maximization, the CBPA also allows such a station to change its DTV channel assignment without protecting Class A stations.³

The Commission has not yet had the opportunity to act on LCC's Petition for Rule Making to substitute a new DTV allotment for the Station. As such, the Station's ultimate DTV channel cannot be known with certainty at this time. It is not clear that maximized facilities proposed in applications submitted after the statutory deadline of May 1, 2000 have certain protection against Class A stations. If the Station filed only one DTV construction permit application for one of the two channels at issue and, for some reason, that permit was not granted, it is possible that the Station's maximized service area on the other channel would not be protected. In light of (1) Congress' intention to provide DTV broadcasters with a full opportunity to maximize; (2) Congress' intention to have the specifics of such maximization known by a date certain through the filing of an application on or before May 1, 2000; and (3) the fact that the CBPA does not explicitly account for the circumstances described herein, LCC accordingly is requesting waiver of Section 73.3517 to permit the submission of contingent DTV construction permit applications for the Station. Grant of the waiver request is in the public interest because it will allow the Commission to authorize maximized facilities for whichever DTV channel the Station ultimately receives.

¹ Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I at pp. 1501A-594 – 1501A-598 (1999), *codified at* 47 U.S.C. § 336(f).

² 47 U.S.C. § 336(f)(1)(D).

³ *Id.*